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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,458	05/24/2001	Satoshi Saito	Q64329	1249

7590 04/17/2003

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EXAMINER

DOVE, TRACY MAE

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 04/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,458

Applicant(s)

SAITO ET AL.

Examiner

Tracy Dove

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-8 and 11-18 is/are rejected.
- 7) ☐ Claim(s) 9, 10, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-8 and 11-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Marukawa et al., US 6,275,003 B1.

Marukawa teaches a battery pack having a cover wherein the inside surface of the cover facing a connecting terminal is provided with an annular rib surrounding the periphery of a portion of the connecting terminal that projects from the outer surface of a nut and is of a height greater than the height of the projecting portion. Thereby, the risk of short-circuiting can be eliminated since any risk of the covers being pierced by the connecting terminals is avoided. Also, if reinforcing ribs are provided in lattice fashion in at least a portion of the outer surface of the cover the risk of short-circuiting can be eliminated even if external forces from various directions act thereon. See col. 2, lines 55-col. 3, lines 8. As shown in Figure 5A, a portion on the inside surface of a cover facing the connecting terminal is provided with annular ribs 27 such

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as to surround the periphery of portions of connecting terminals 5, 6 that project beyond nuts 24 that are screw-threaded thereon. The annular ribs have a height H greater than the height h of the projecting portions of the terminals. Furthermore, as shown in Figure 5B, reinforcing ribs 28 are formed in lattice fashion on the outer surface of the cover (col. 5, lines 42-62).

Thus the claims are anticipated.

2. Claims 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamada et al., US 5,800,942.

Hamada teaches a cover 16 adapted to be mounted on a storage battery (col. 12, lines 41-65). The inner surface of the cover has a pattern of recesses 17d that are aligned with anchor nuts on the positive and negative terminal posts so that they can be accommodated within the recesses 17d. See Figure 11 and col. 13, lines 45-54.

Thus the claims are anticipated.

3. Claims 1, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Henk, US 4,400,449.

Henk teaches a battery having a top cover 43 with ribs 53 on the upper side of the cover. See Fig. 5 and col. 9, lines 11-14. Figure 5 discloses the limitations of instant claims 9 and 10.

Thus the claims are anticipated.

Allowable Subject Matter

Claims 9, 10, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter: the claims are directed toward a battery cover having a plurality of ribs formed on an outer surface of the battery cover. The ribs are interconnected by at least one bulge portion formed on the battery cover (see Figure 10 of instant specification).

The prior art does not teach a battery cover having a plurality of ribs formed on an outer surface, which are interconnected by at least one bulge portion formed on the battery cover.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ronning teaches ribs having various shapes formed in the battery container 2. Ronning does not disclose the ribs are formed on the outer surface of the battery cover 4.

Andreoff teaches a battery cover having a corrugated structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is (703) 308-8821. The Examiner may normally be reached Monday-Thursday (9:00 AM-7:30 PM). My supervisor is Pat Ryan, who can be reached at (703) 308-2383. The Art Unit receptionist can be reached at (703) 308-0661 and the official fax numbers are 703-872-9310 (after non-final) and 703-872-9311 (after final).

April 15, 2003


Patrick Ryan
Supervisory Patent Examiner
Technology Center 1700